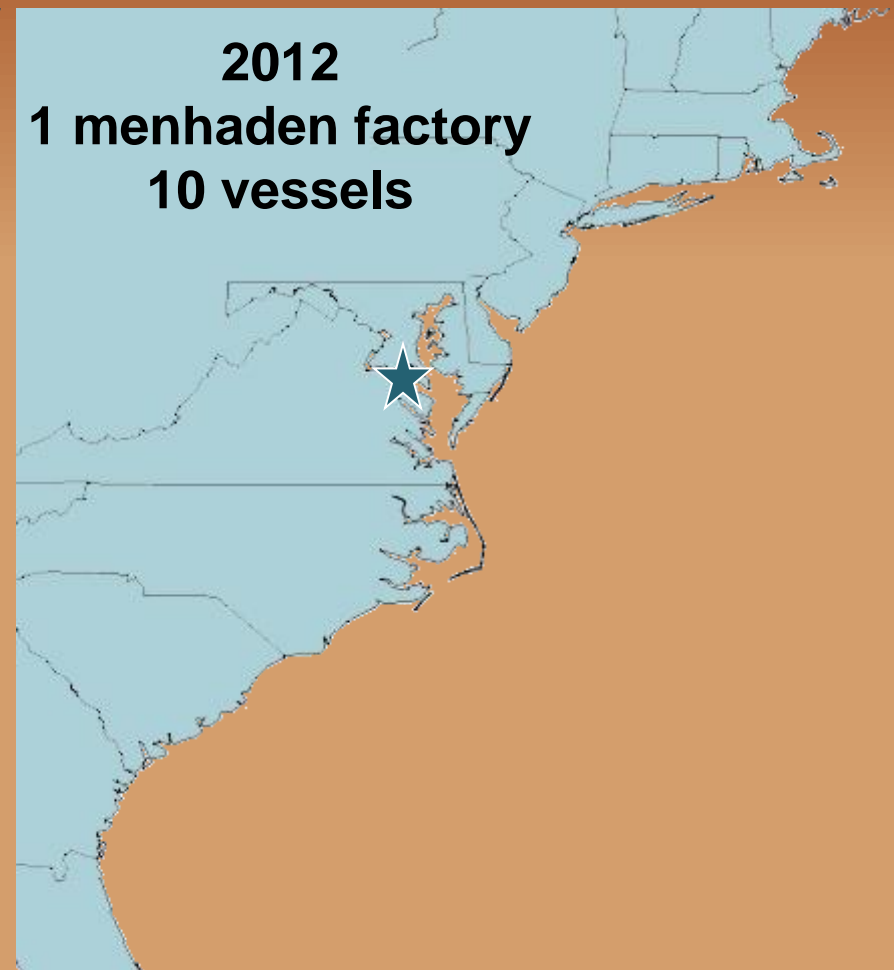
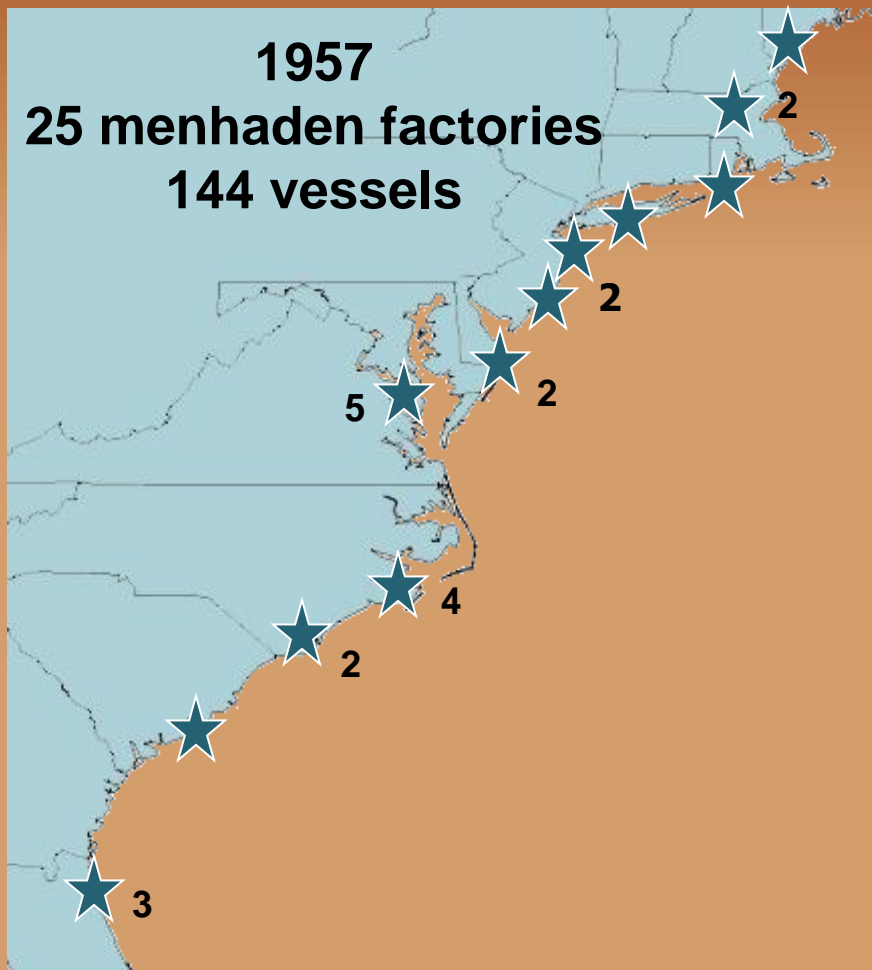


North Carolina Menhaden Fishery Management



**Marine Fisheries
Study Committee
Feb. 2, 2012**

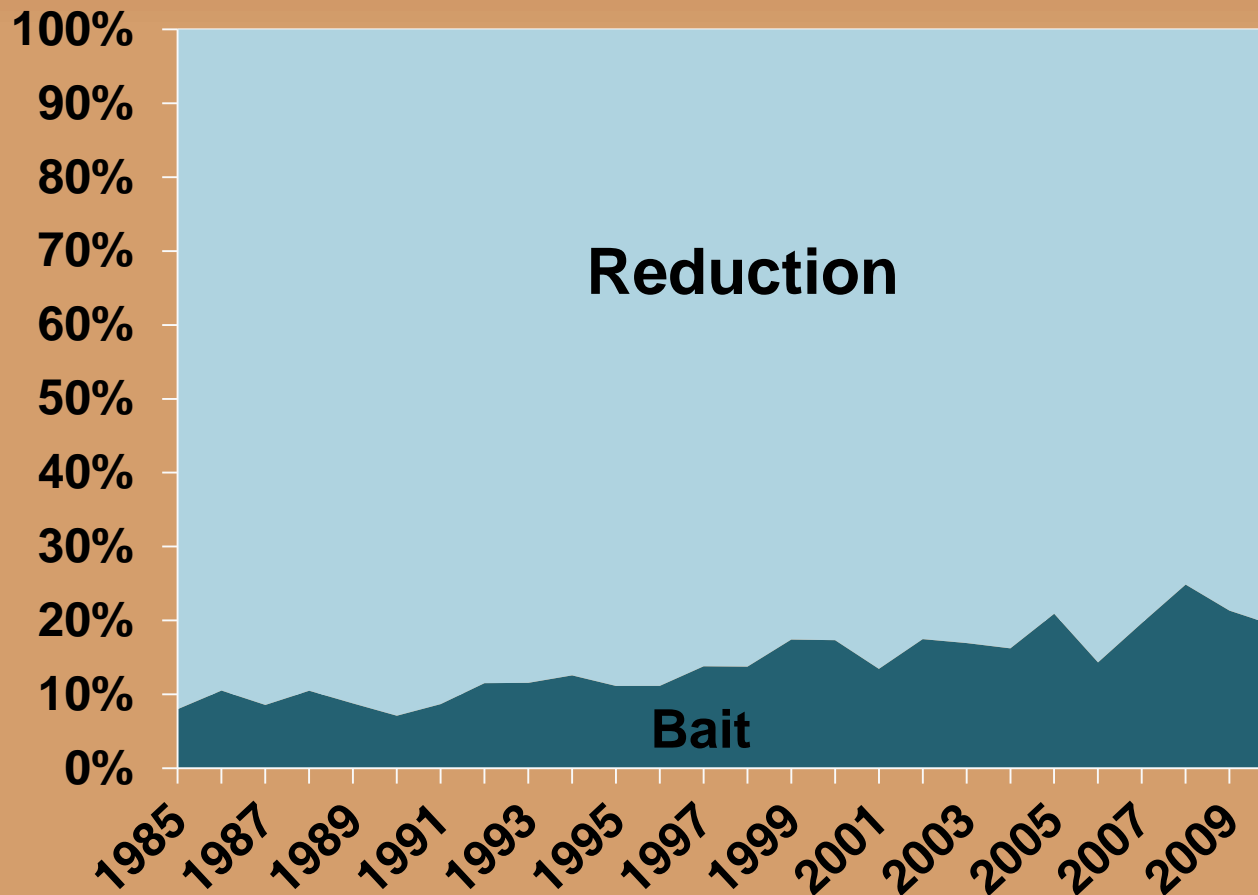




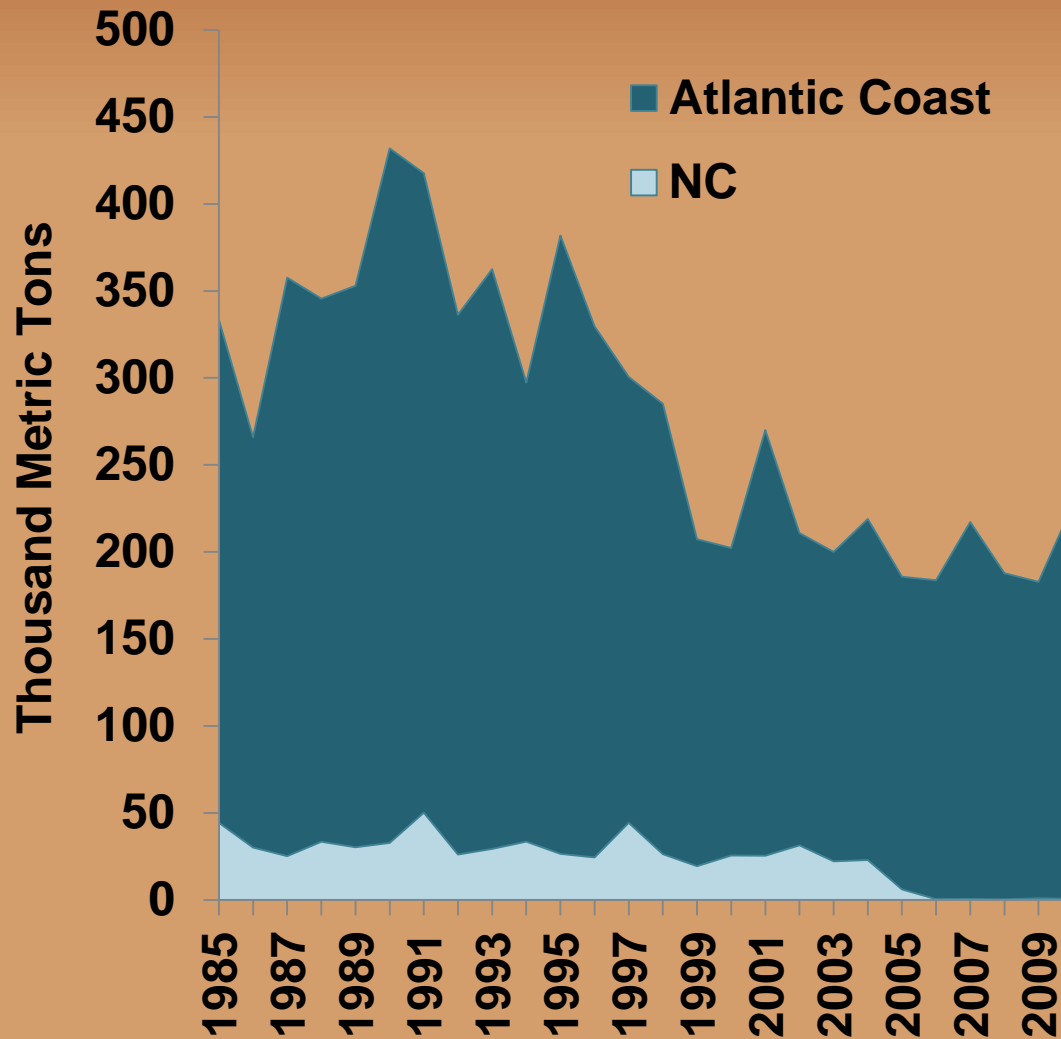
★ Menhaden factory locations



Coast-wide Reduction and Bait Landings



N.C. and Coast-wide Landings



N.C. Commercial Menhaden Landings

2006 - 2010

	Average Annual Landings (pounds)	Percent of Total Landings
Gillnet	466,009	37.8%
Flynet	397,364	32.2%
Pound Net	203,495	16.5%
Other	166,314	13.5%
State Total	1,233,128	100%
<i>Coast-wide Total</i>	<i>440,276,988</i>	<i>(0.3%*)</i>

*Denotes average state landings as a percent of average coast-wide landings for 2006 to 2010



N.C. Commercial Menhaden/Other Landings (Pounds)

Year	Menhaden	All Other Species
2006	962,648	67,780,699
2007	1,134,167	61,740,812
2008	645,231	70,554,957
2009	2,124,733	66,836,173
2010	1,299,130	70,697,970



N.C. Commercial Menhaden/Other Value (Ex-vessel)

Year	Menhaden	All Other Species
2006	\$147,779	\$69,937,740
2007	\$139,178	\$82,145,447
2008	\$70,339	\$86,739,422
2009	\$229,648	\$76,950,212
2010	\$111,552	\$79,713,301



A map of the Atlantic coast of the United States, showing the distribution of Atlantic Menhaden purse seine sets in 2010. The map is color-coded: light blue for the ocean and tan for land. Red triangles represent the locations of the fishing sets. The highest density of sets is in the Chesapeake Bay area, with a significant number of sets also along the Virginia and North Carolina coasts. The sets are more sparsely distributed further south and along the inner coast.

Atlantic Menhaden Purse Seine Sets for Reduction in 2010

Source: J.W. Smith, NMFS, Beaufort Lab, March 2011



N.C. Recreational Importance

- **Used for bait in many recreational fisheries**
- **Mostly captured by cast net**
- **Unknown impact on stock**



N.C. Commercial Importance

- **Source of revenue and income**
- **Landings are primarily for bait use**
- **Commercial blue crab fishery heavily relies on menhaden for bait**



N.C. Commercial Economic Information 2010

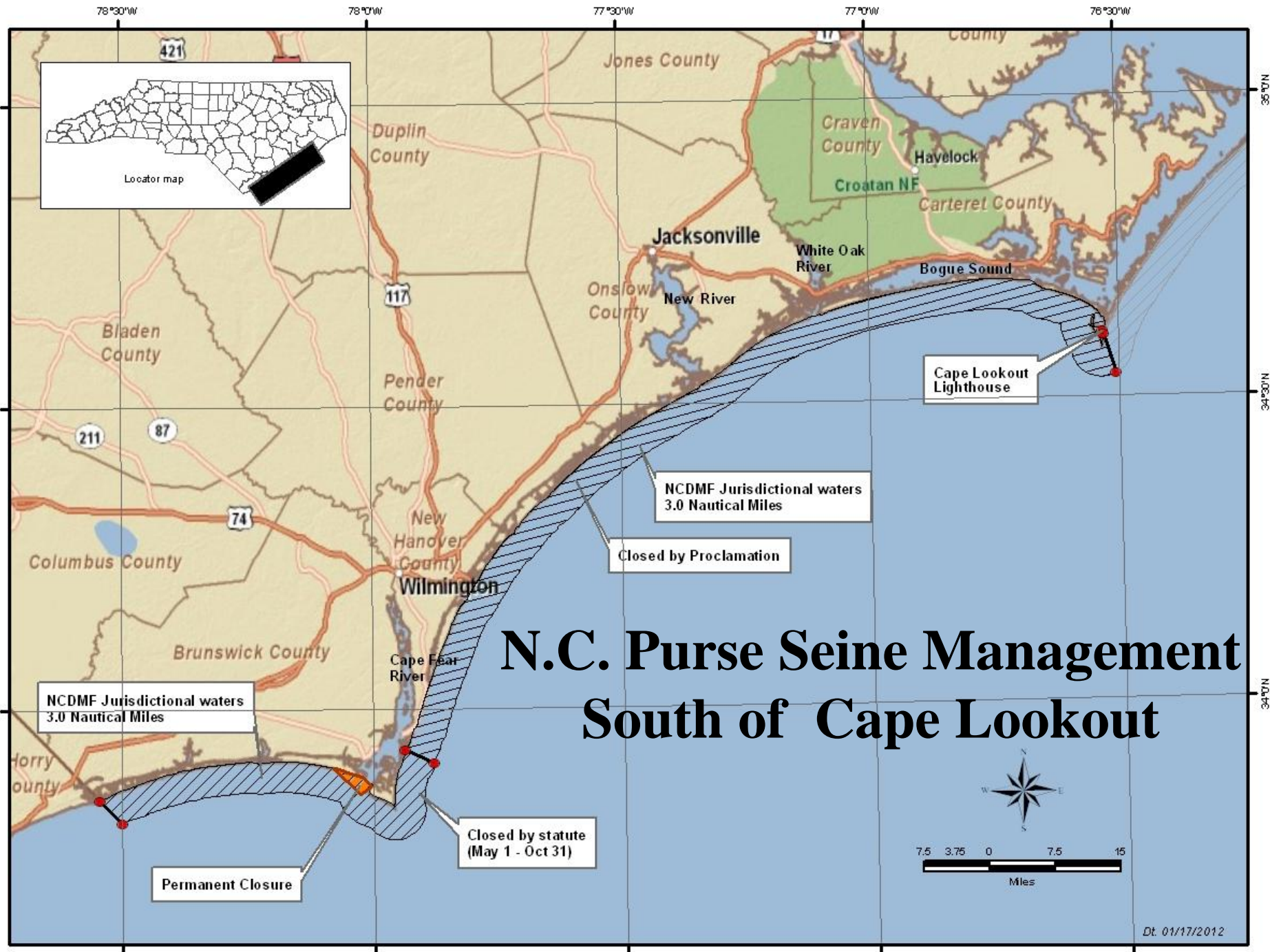
- **258 commercial fishermen reported landing menhaden in 1,629 trips**
- **Commercial landings totaled 1.3 million pounds of menhaden worth \$111,552**
- **Blue crab fishermen used an estimated 11.2 million pounds of menhaden as bait**
- **Commercial fishermen spent approximately \$3 million on menhaden for use as crab bait**

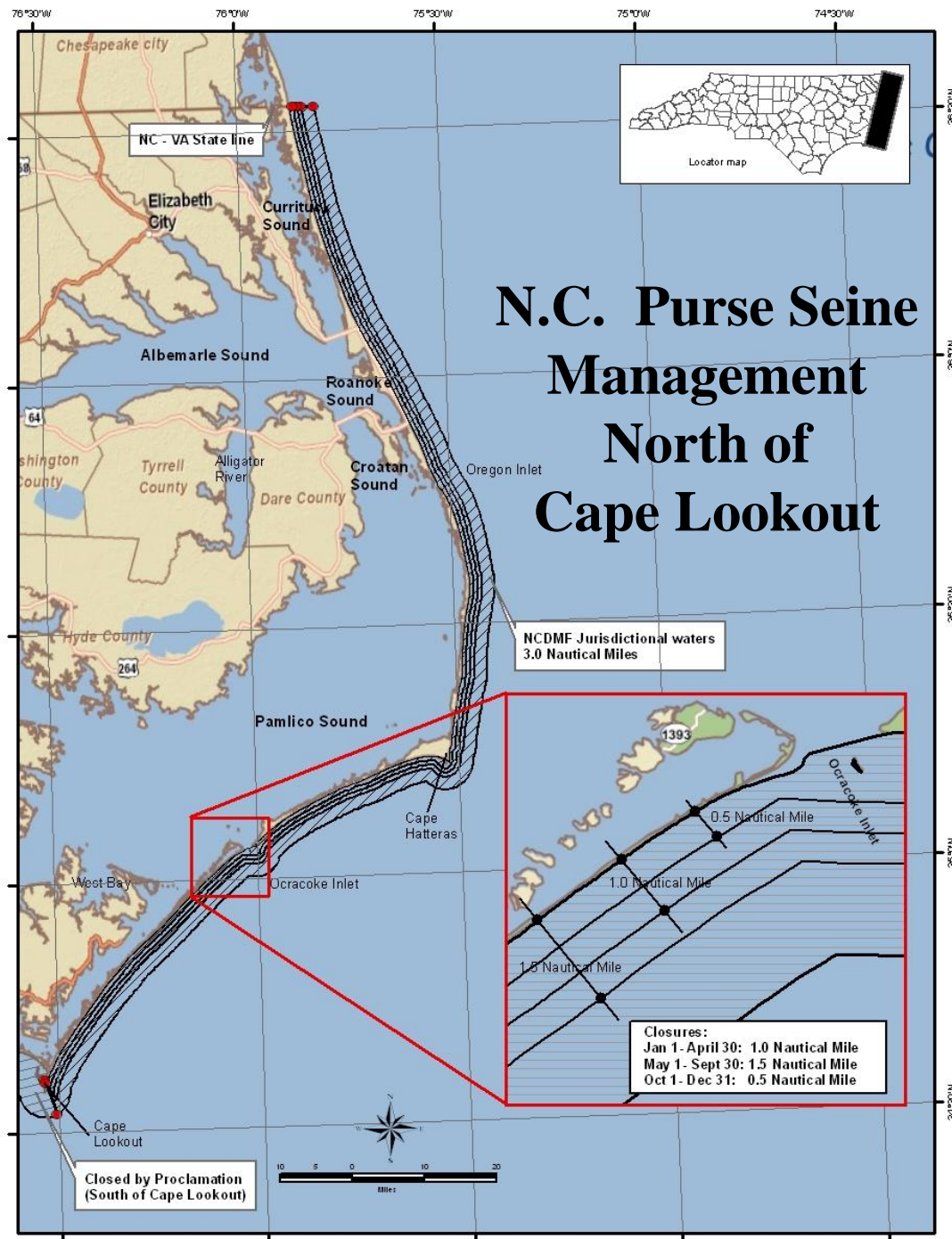


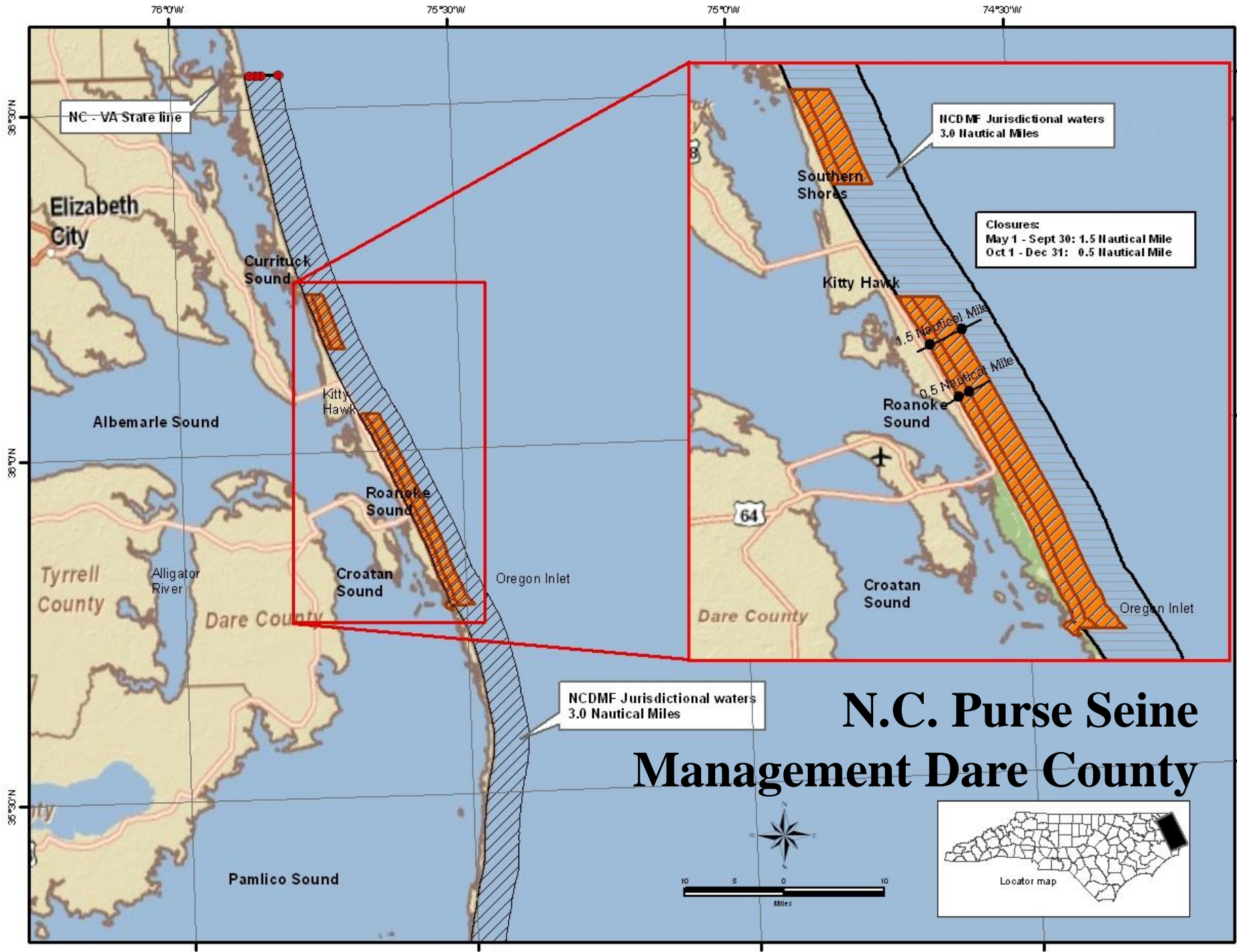
Past State Issues

- In 2004, a Louisiana menhaden vessel was cited for illegally netting and filleting striped bass off Shackleford Banks
- In 2009, a purse seine vessel's nets split, releasing 150,000 pounds of dead fish, including red drum
- Various other reports of net splits that spill fish on the beach
- Conflict with recreational anglers
- Complaints from local governments









Coast-wide Management

- **Managed by Atlantic States Marine Fisheries Commission (ASMFC)**
- **Reduction fishery restricted by a Chesapeake Bay quota**
- **No restrictions in Atlantic Ocean**



Recent ASMFC Actions

- **Revised 2010 benchmark stock assessment found Atlantic menhaden is not overfished, but overfishing is occurring**
 - **Overfished: The population is too low**
 - **Overfishing: The rate of removal is too high**
- **Established new fishing mortality threshold and target levels that recognize ecosystem function and importance of menhaden**
- **Needed harvest reductions/management measures will be identified and taken to public hearing in 2012**



Potential Impacts of ASMFC Measures

- **Reduction fishery**
 - Omega Protein
- **Bait fishery**
 - Commercial fishery
 - Crab fishery
 - Recreational fishery



Questions?

